

High molecular weight surface proteins of non-typeable Haemophilus influenzae which exhibit immunogenic properties and genes encoding the same are described. Specifically, genes coding for two immunodominant high molecular weight proteins, HMW1 and HMW2, have been cloned, expressed and sequenced, while genes coding for high molecular weight proteins HMW3 and HMW4 have also been cloned, expressed and sequenced.